

RE: Follow Up to June 21/22 FS Meeting

King, Todd

to:

Chip Humphrey, Kristine Koch

07/15/2011 02:29 PM

Cc.

"Penoyar, Susan", "French, Ronald"

Hide Details

From: "King, Todd" < KingTW@CDM.com>

To: Chip Humphrey/R10/USEPA/US@EPA, Kristine Koch/R10/USEPA/US@EPA,

Cc: "Penoyar, Susan" < PenoyarSJ@cdm.com>, "French, Ronald" < FrenchRD@cdm.com>

And...with respect to data requests:

- 1) FS database we have
- 2) Docks/structures we have, but would be worth asking for an updated one
- 3) Current SMA and subSMA layers
- 4) Theissen polygon layer (or layers if RAL COC specific)
- 5) Sediment model grid layer (No immediate use for this, but may come in handy later to address key things like: 1) how did they approximate hydraulic shear stress, 2) what did they assume for sediment types, 3) how accurately did the portray the bathymetry in the model, 4) how does the size of the average grid segment relate to the SMAs which we are comparing them to...

ΤK

From: King, Todd

Sent: Friday, July 15, 2011 5:13 PM

To: 'Humphrey.Chip@epamail.epa.gov'; Koch.Kristine@epamail.epa.gov

Cc: Penoyar, Susan; French, Ronald

Subject: Follow Up to June 21/22 FS Meeting

Chip/Kristine-

My notes on the meetings...for your use. Unchecked by Susan and Ron...so you can only throw me off the project...(joke...well sort of...)

Call if questions.

Thanks,

bboT

Day 1 – June 21, 2011

- 1) Internal Peer Review Panel consisting of :
 - a. Victor Magar, Environ
 - b. Mike Palermo, Consultant for Port of Portland
 - c. Richard Wemming, Environ, Toxicologist
 - d. Steve Nadeau, Sediment Management Work Group
 - e. Significant issues
 - i. Findings, opinions of peer panel will NOT be made available to agencies
 - ii. Jim Anderson asked if Adaptive Management was a part of the process Victor

answer "Not really"

- iii. TK comment- the panel is irrelevant to the decision makers since none of their comments will be made available. We have no way to determine if panel's advise is followed or ignored.
- 2) Various Presentations on FS topics
 - a. RALs and RAL Rationale discussion Clay Patmont –"03"
 - i. All time based projections of attaining goals are running through the fate and transport model
 - ii. Did not factor resuspension from dredging into RALs
 - iii. TK comment everything relies on the "Model" need to make sure agencies are comfortable with calibration, validation, and scenario inputs
 - b. RAL Relationship to PRGs "04"
 - i. Used natural neighbor and then truncated data to 200-250' radius. Basically creating "no man's land" of areas within AOPCs
 - ii. Used selected RAL contaminants to be surrogates BAP eq, Total PCB, Sum DDE
 - iii. For site wide "Alt F" add total BAP, Dioxin TEQ, and total chlordane
 - iv. TK comment need to look at all exceedances of COCs above RAO thresholds when risk assessments finalized. Also need to consider depth. We won't truncate interpolation due to lack of data. Draw polygons to reflect decision units then decide if action required.
 - c. Comprehensive Alternatives Summary "07"
 - i. Dredge volumes significantly overestimated due to 1 or 2' over dredge. Discussion seems to point to 1' overdredge max.
 - ii. RAL based on contours exceeding threshold rather than "Hilltopping" approach proposed during FS tool development
 - iii. Develop sub SMAs based on landuse/remedy access
 - iv. Used 5% of initial concentration as PCB replacement value for dredge (and cap?)
 - v. TK comment need GIS data layers to independently confirm areas, depths, quantities and check concentration and RAL "what ifs" wrt potential remedies.
- 3) Agency discussion post meeting day 1
 - a. Protectiveness not being directly evaluated across alternatives
 - b. Without PRGs based on BSAFs, how will sediment clean up critera be used?
 - c. If no RAL used for a COC, how can you make sure the clean up addresses all risks?
 - d. What is the upgrade of path of an alternative based on monitoring
 - e. Outside of the SMAs, MNR is the only alternative under consideration, does this meet the requirements of an FS under CERCLA?
 - f. EPA needs to research Sum DDE vs DDx...why was this done?
 - g. Need to discuss fish window options to determine how variances could impact alternative costs/assumptions
 - h. TK comment when RAOs are final, with associated sediment remedial goals, we can use LWG SMA foot prints to check for outlying exceedances unaddressed by alternatives GIS/database exercise
- 4) Day 2 June 22, 2011
 - a. Methods for Volume Determination using RALs for Each Alternative "06"
 - i. Volume based on RALs based on Total PCBs, BaP Eq, Mean Quotient and Sum DDE for Alts B-E and total BaP, chlordane, Sum DDE and 2,3,4,7,8 PCDF
 - ii. Used Theissen polygons
 - iii. Subsurface analytical NOT used to develop footprint surface samples only
 - iv. Theissen polygons "joined" with SubSMAs to develop action polygons, area, depth and volumes

- v. Discussion on overdredging allowance 6" per Karl G., Mike Palermo approx 12" LWG used 24" too high. Should be 30-50% allowance for overcut after dredge box volume determined.
- vi. TK comment need layers of Theissen polygons and subSMAs to check...
- b. Volume Cost Methods Examples "08"
 - i. Volume calculations laid out in spreadsheet.
 - ii. Overdredge issues
 - iii. Will need to review unit costs for consistency
 - iv. TK comment Need to check incomplete cores, depth of contamination, exceedances outside of subSMA footprint, and put in reasonable overdredge estimate
- c. Mitigation Cost Methods "09:
 - i. Transformational costs vs. acquisition costs acquisition not included
 - ii. Shows dredging/capping as net negative wrt habitat seems counterintuitive
 - iii. High on-site mitigation costs \$1 to 2MM per acre not realistic-assumes worst case
- d. Detailed Analysis of Alternatives "10"
 - i. Not much to comment on, just formatting of upcoming analysis to be presented in FS
- 5) Day 2 Agency Discussions
 - a. Need to add enhanced MNR to sitewide AOPC/SMA
 - b. No consideration of "Hot Spots" outside SMA footprints this is an ARAR under ODEQ rules
 - c. Over reliance on Fate and Transport model
 - d. No "engineering" evaluation of implementability of dredging or capping based on sediment types, erodibility, hydrodynamic considerations, etc.
 - e. Need to develop monitoring program to evaluate trends in fish, other biota, surface water and sediment.
 - f. Need to use monitoring program to stipulate "upgrade" path for less aggressive remedies if not successful. Determine how to right into ROD.
 - g. Research DDE issue.

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